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CESTOCRINUS, A NEW FOSSIL INADUNATE CRINOID
GENUS

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IN 1934¹ I described the new crinoid genus *Corynecrinus*, for the reception of which and one other genus (*Leocythocrinus* J. Müller) I proposed the family Leocythocrinidae in the order Inadunata. Both genera are of Devonian age, one from Europe and one from the United States. I am now able to add another genus to this family, coming from the Mississippian (upper Borden) of Indiana.

CESTOCRINUS, new genus

Genotype.—*Cestocrinus striatus*, new species.

Generic diagnosis.—

Crown. Subcylindrical.

Dorsal cup. Campanulate to urn-shaped.

IBB. Five. Large, approximately one-third the height of the dorsal cup.

BB. Of medium size, except post B, which is very large, extending to the level of the arm bases and supporting two tube plates.

RR. Relatively small. Arm facets elevated above level of plates, horseshoe-shaped, and approximately one-half width of radial at that level.

Arms. Relatively slender, composed of subcylindrical, long Br.

Number of IBr variable: 3 in l ant R; 4 in r ant R; more than 4 in ant R in type species.

¹ *Corynecrinus*, a new Devonian crinoid genus. Proc. U. S. Nat. Mus., vol. 83, pp. 1-7, 1 pl., 1934.

Post IR. No anal plates in cup. The entire area of the post IR up to the level of the arm bases is occupied by the hypertrophied post B. Resting on the distal faces of this B are two large plates which can be considered only as tube plates.

Ventral sac. Judged from the proximal portion of the ventral sac as preserved, the tube was relatively slender, subcylindrical in shape, and composed of fairly large plates.

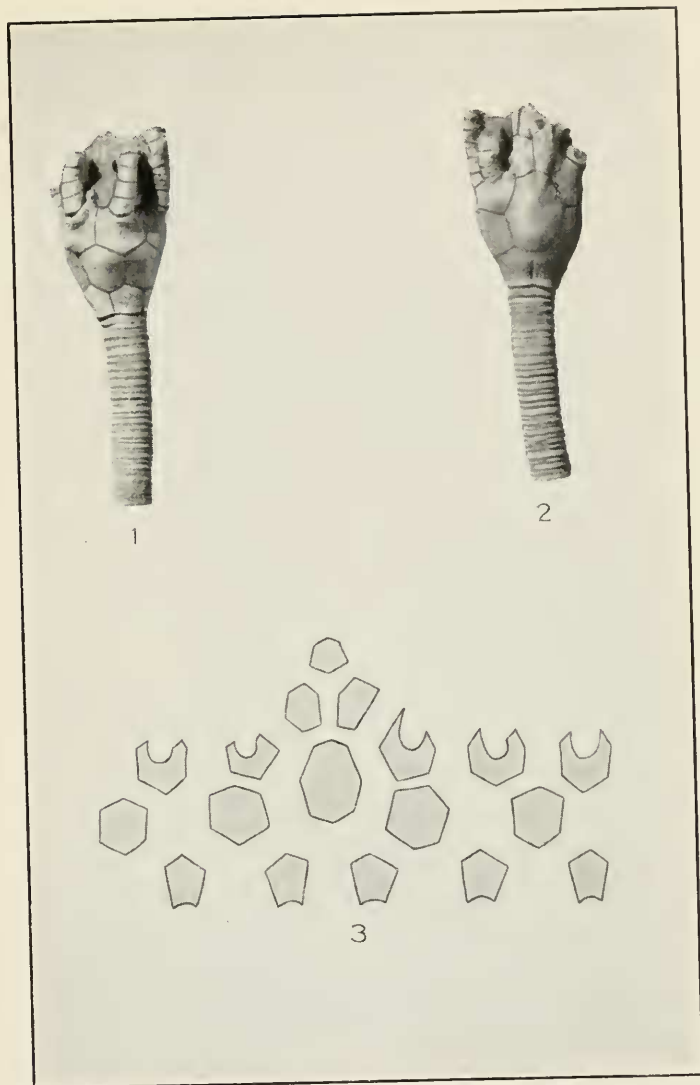
Column. Stout, circular in section, composed of alternate nodals and internodals. Lumen large, outline indistinct in polished section but apparently pentagonal.

Species. The only known species referable to *Cestocrinus* is the new species *C. striatus*, here described.

Geologic and geographic distribution.—The type species was found in the upper Borden (Mississippian, lower Carboniferous) of Indian Creek, Montgomery County, Ind.

Relationships.—The peculiar structure of the posterior interradius, together with similarities of arm structure and general resemblance, seems clearly to ally *Cestocrinus* with *Lecythocrinus* Müller and *Corynecrinus* Kirk. Of the two formerly described genera, *Cestocrinus* more nearly resembles *Corynecrinus*. The two genera differ in well-marked structural characters. In *Corynecrinus* the post B is but slightly larger than the other BB. In *Cestocrinus* the post B is very large, reaching to the level of the arm bases. In *Corynecrinus* the IBB are very small and scarcely visible in lateral view. In *Cestocrinus* the IBB are large, approximately one-third the height of the cup. The arm-bases in *Cestocrinus* are sharply elevated above the level of the RR and are relatively narrower than in *Corynecrinus*. As seen, there are many more IBr in *Corynecrinus* than in *Cestocrinus*. In *Corynecrinus* the two proximal tube plates lie well down in the cup, and the tube plates of the second range rest on the upper sloping shoulders of the r and l post RR. In *Cestocrinus* the pair of proximal tube plates have been raised above the level of the cup and rest on the upper sloping shoulders of the r and l post RR.

The persistence of this tenuous genetic crinoid line from the Middle Devonian well up into the lower Mississippian is very interesting. *Cestocrinus* shows no resemblance to any known Carboniferous inadumate genus, and one must cast back into the Middle Devonian to find like structural forms. At all times members of the family seem to have been exceedingly few in number. *Lecythocrinus* is represented by a few specimens. *Corynecrinus* is known from but a single specimen. *Cestocrinus*, also, is based on a unique specimen. Since many thousands of crinoids have been collected at Crawfordsville and Indian Creek, Ind., as well as from approxi-



CESTOCRINUS STRIATUS. NEW GENUS AND SPECIES.

- 1, Anterior view.
- 2, Posterior view.
- 3, Plate diagram.

